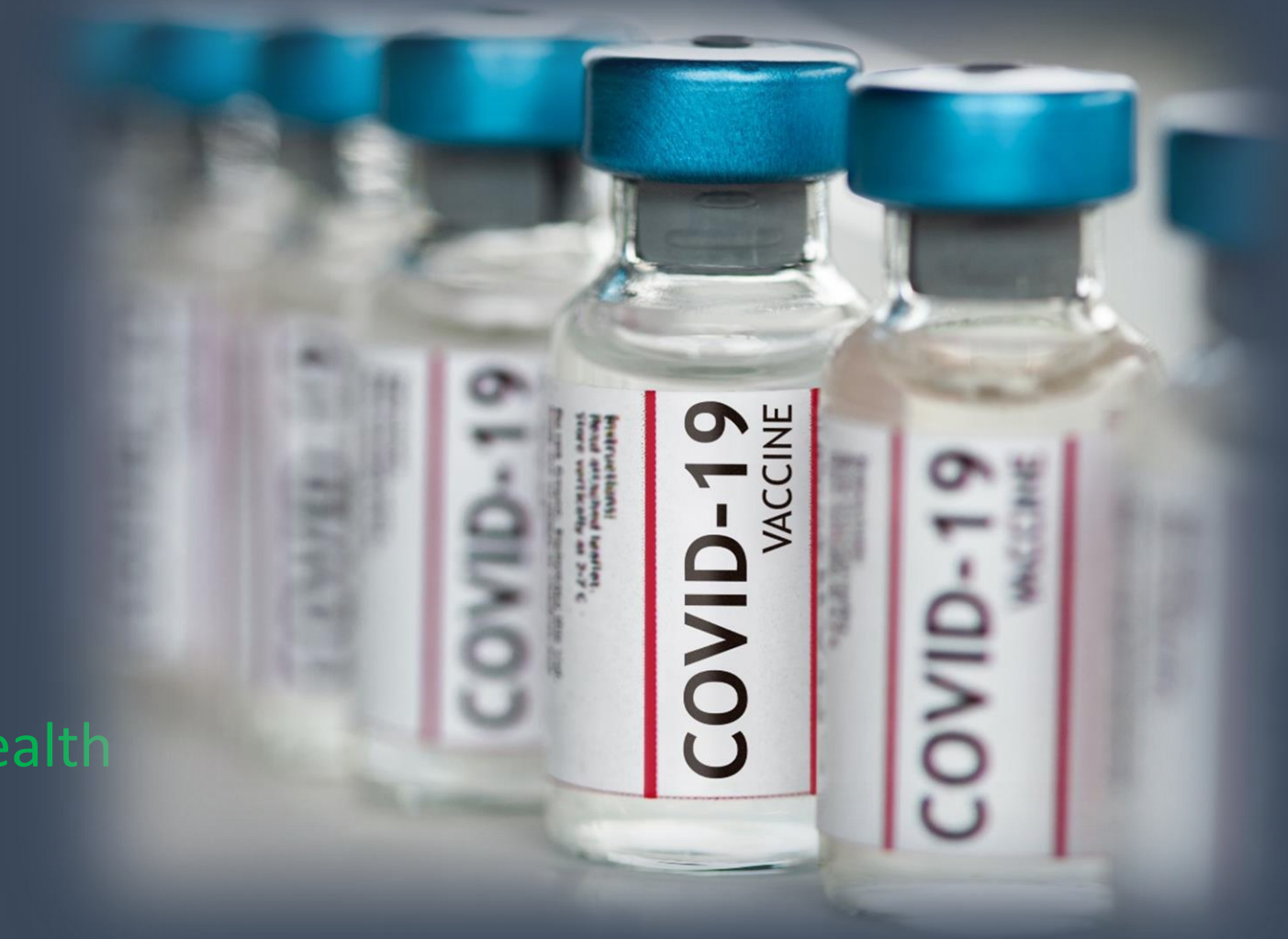
Do Your Part to Prevent COVID-19 Vaccine Administration Errors A Primer for Health Care Workers



Andrew Kroger, MD, MPH

Hosted by the WA Department of Health

April 29, 2021

Moderator

Phil Wiltzius, MS, CHES

Health Educator
Washington Department of Health

Center for Public Affairs

Before We Start…

- All participants will be muted for the presentation.
- You may ask questions using the Q&A box, and questions will be answered at the end of the presentation.
- Continuing education is available for nurses, medical assistants, and pharmacists attending the webinar or watching the recording. If you're watching in a group setting and wish to claim CE credit, please make sure you register for the webinar as an individual and complete the evaluation separately.
- You can find a copy of the slides and more information on our webinar page here: www.doh.wa.gov/YouandYourFamily/Immunization/ImmunizationNews/ImmunizationTraining/PreventCOVID19VaccineAdministrationErrorsWebinar

Presenter

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Communication and Education Branch, Immunization Services Division
CDC National Center for Immunization and Respiratory Diseases

Continuing Education Disclosure

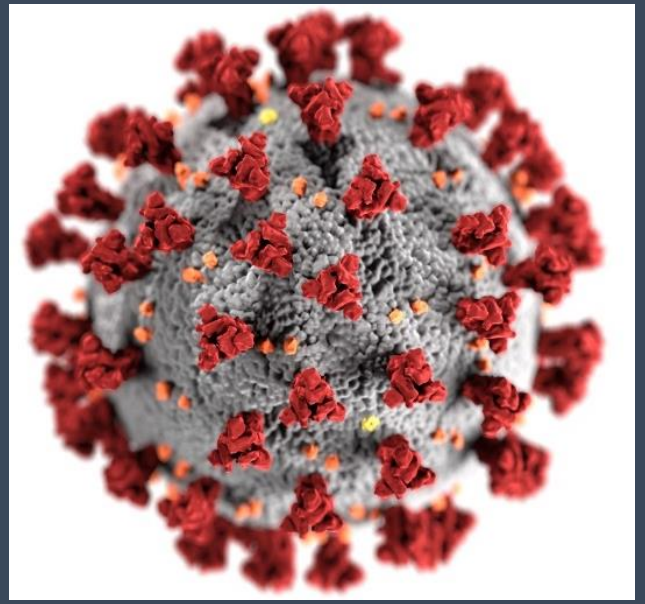
- The planners and speakers of this activity have no relevant financial relationships with any commercial interests pertaining to this activity.

- Information about obtaining CEs will be available at the end of this webinar.

Continuing Education

- This continuing nursing education activity was approved by the Montana Nurses Association, an accredited approver with distinction by the American Nurses Credentialing Center's Commission on Accreditation. Upon successful completion of this activity, 1.0 contact hours will be awarded.
- This program has been granted prior approval by the American Association of Medical assistants (AAMA) for 1.0 administrative continuing education unit.
- This training was approved by the Washington State Pharmacy Quality Assurance Commission (PQAC) for pharmacist education. Upon successful completion of this activity, 1.0 credit hour of continuing education will be awarded.

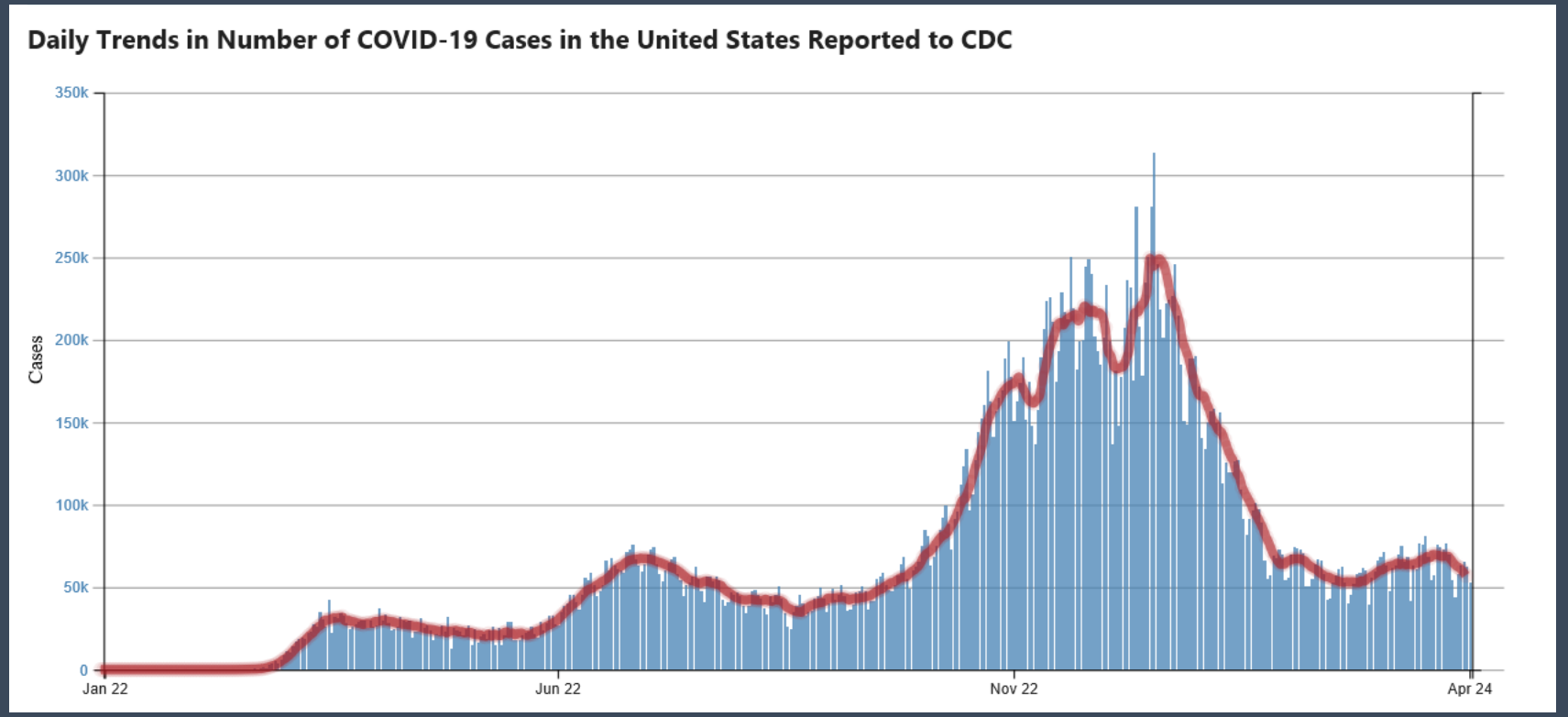
COVID-19: Emergence



- Identified in Wuhan, China in December 2019
- Caused by the virus SARS-CoV-2
- Early on, many patients were reported to have a link to a large seafood and live animal market.
- Later patients did not have exposure to animal markets.
  - Indicated person-to-person spread
- Travel-related exportation of cases reported
  - First U.S. case: January 20, 2020 https://www.cdc.gov/mmwr/volumes/69/wr/mm6924e2.htm?s_cid=mm6924e2_w
- CDC is reporting confirmed COVID-19 cases in the U.S. online. at www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html

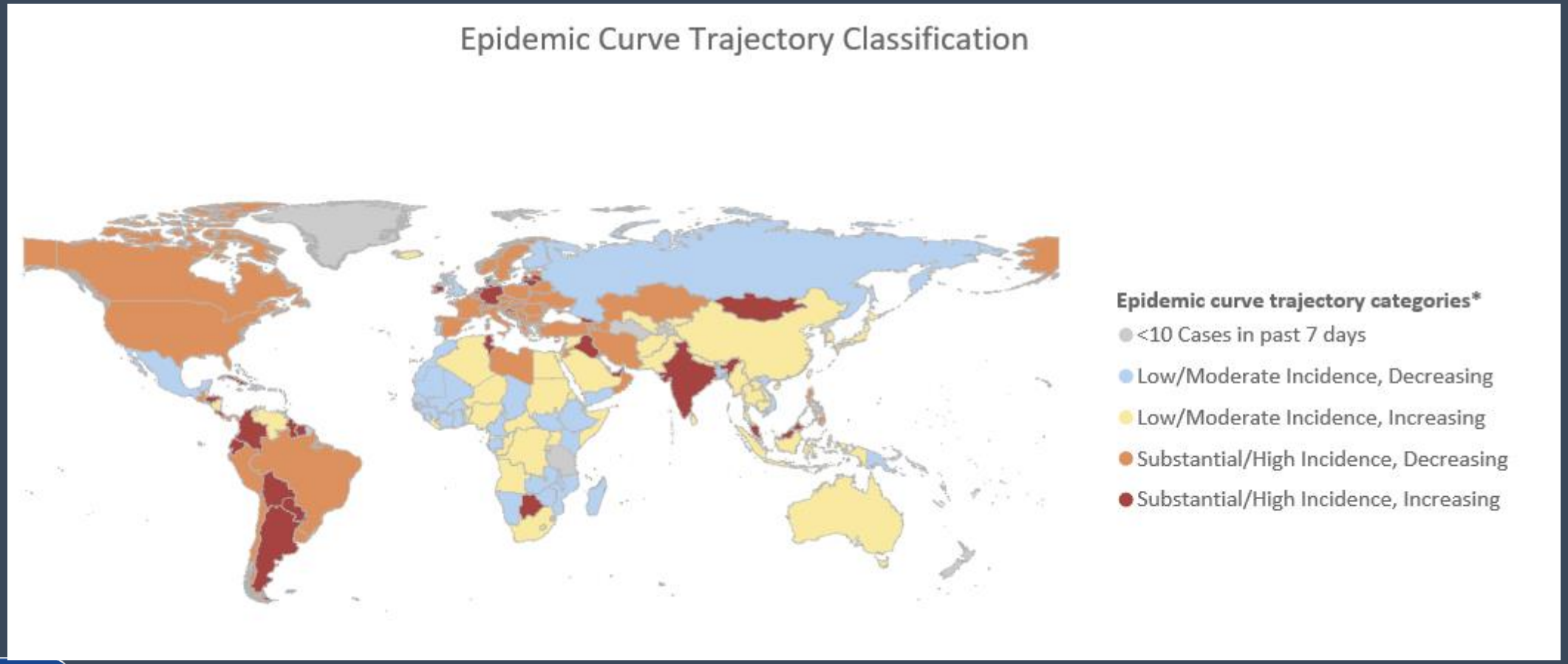
COVID-19: Epidemiology

- https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases (April 26, 2021)

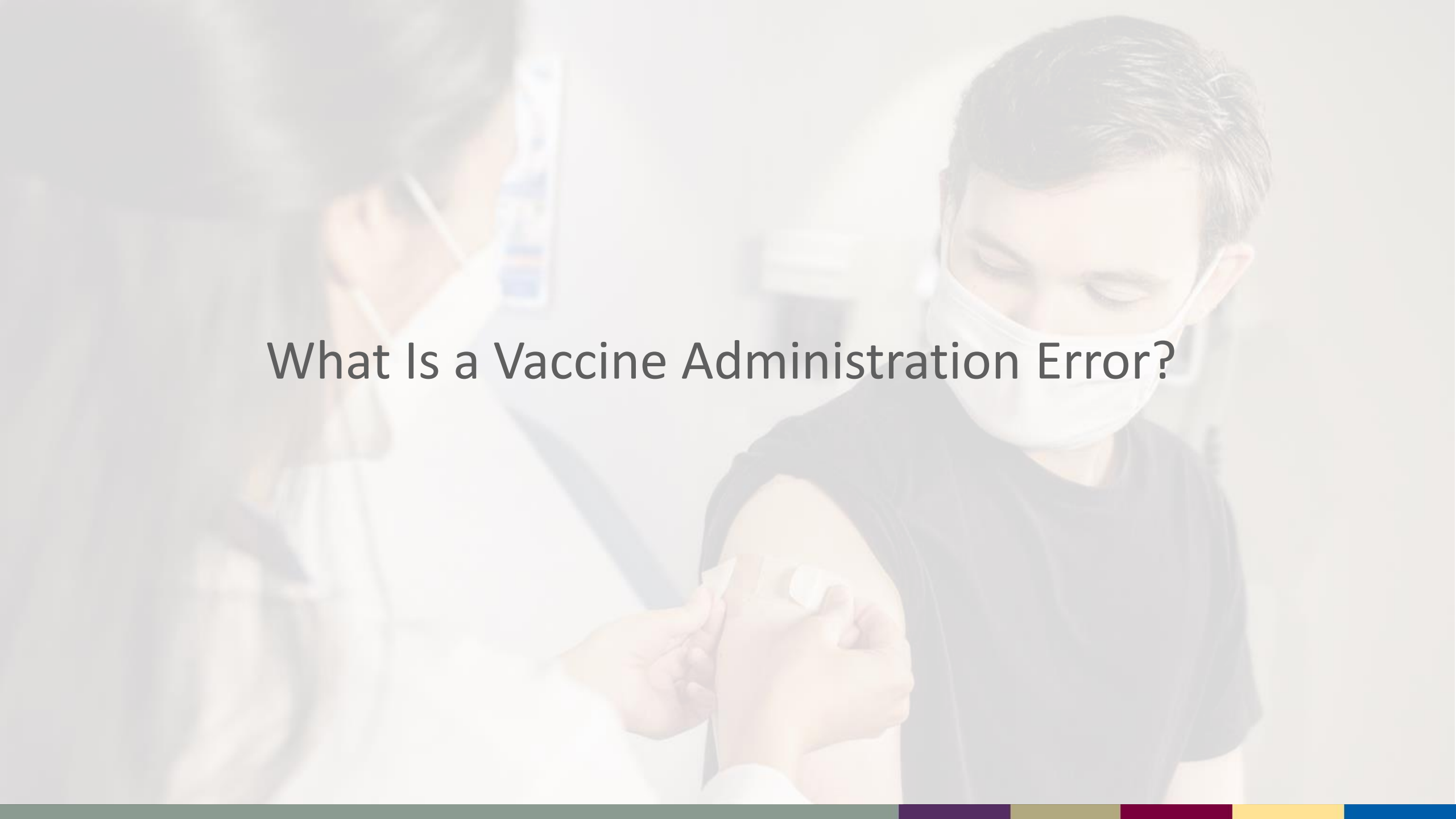


COVID-19: Epidemiology

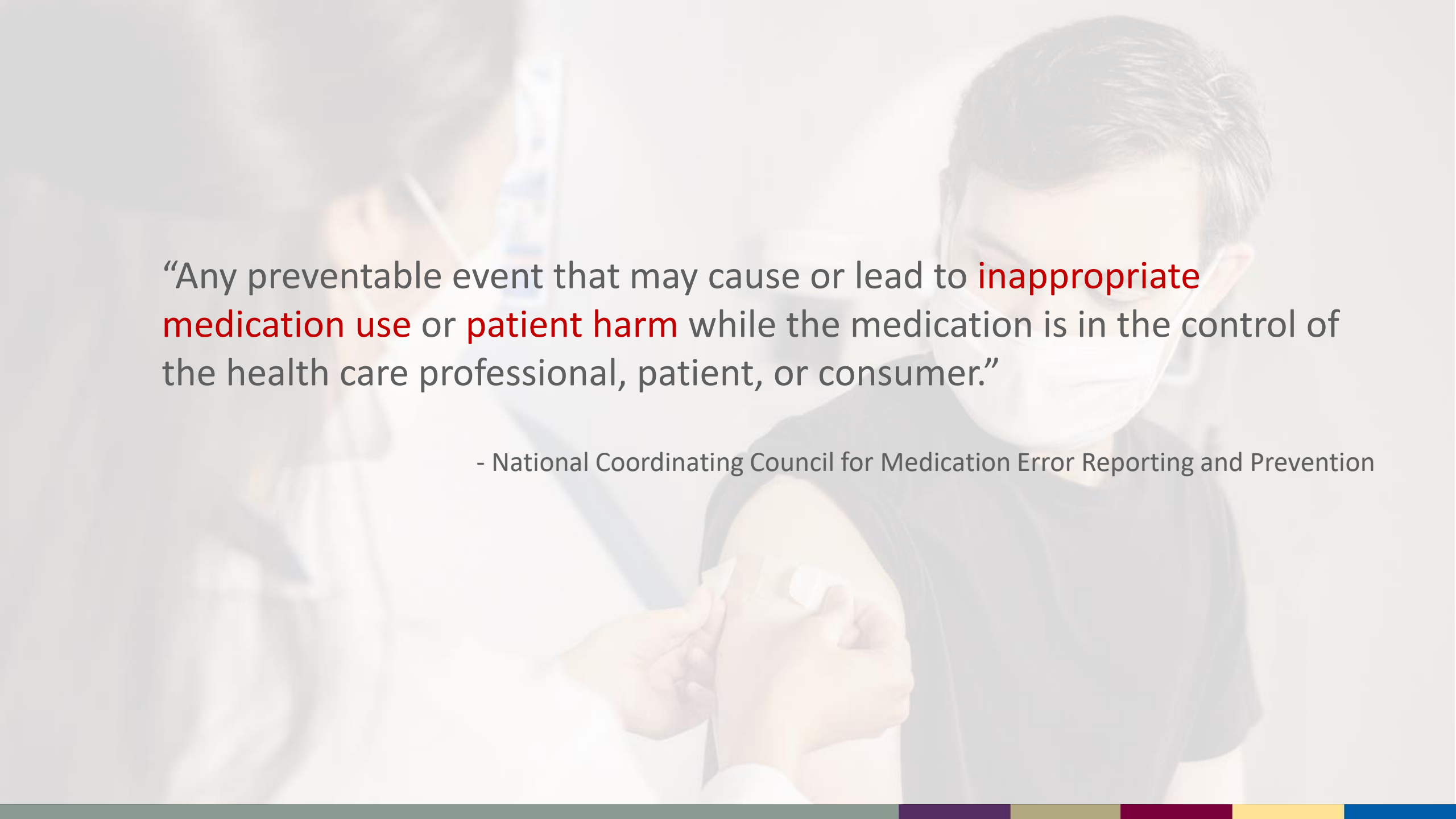
- https://covid.cdc.gov/covid-data-tracker/#global-counts-rates (April 26, 2021)



- **Recognize** common vaccine administration errors
- **Prevent** errors from occurring
- **Build** public trust in all vaccines



What Is a Vaccine Administration Error?



"Any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer."

- National Coordinating Council for Medication Error Reporting and Prevention

Causes of Vaccine Administration Errors

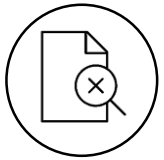
Insufficient staff training

Lack of standardized protocols

Patient misidentification

Product misidentification

Changes in recommendations



Using nonstandard or error-prone abbreviations

Common Vaccine Administration Errors

- Scheduling Errors
- Wrong Patient
- Wrong Vaccine, Route, Site, or Dosage
- Incorrect Vaccine Preparation
- Improper Storage and Handling of Vaccine and Diluent
- Documentation Errors

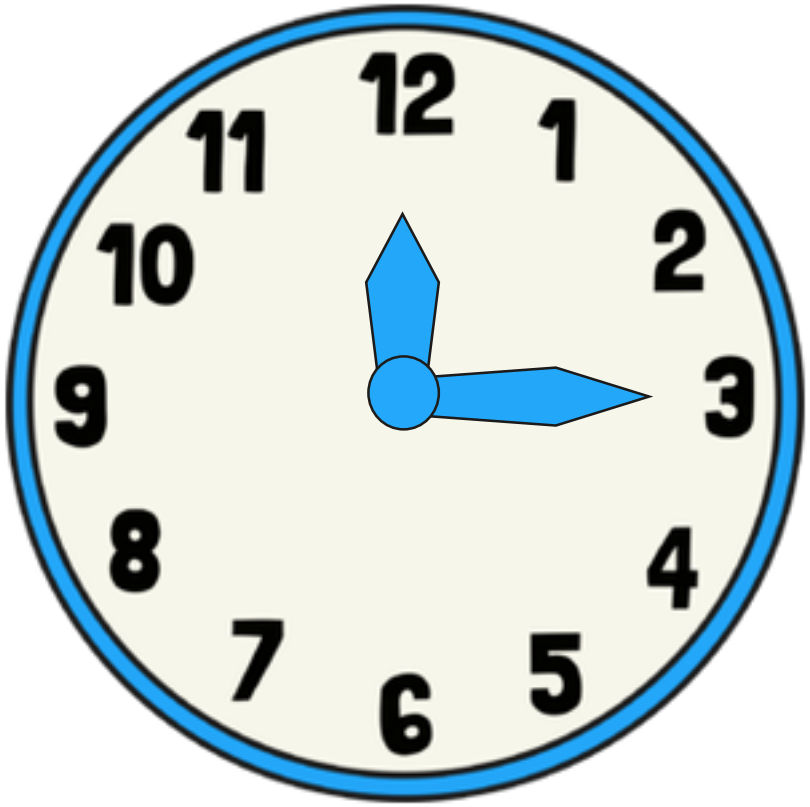
Common Vaccine Administration Errors

Scheduling Errors

Wrong

What Is a Scheduling Error?

What Is a Scheduling Error?



Any dose administered **too early**

- Before the minimum time interval between doses
- Before the minimum age

What Is a Scheduling Error?

- 21 Days between Doses

- 28 Days between Doses

What Is a Scheduling Error?

- 16 years old

- 18 years old

Preventing Scheduling Errors

- Standing orders
- Screening checklist
- Proactively scheduling the second appointment
- Immunization information systems
- Personal/provider records

Scheduling Second Appointment

- Do NOT use grace period to schedule second dose

Scheduling Second Appointment

- 21 days between doses
- 28 days between doses
- No maximum interval, but recommend within 6 weeks

Scheduling Second Appointment

- 21 days between doses
- 28 days between doses
- DO NOT restart the series if these intervals are missed

Common Vaccine Administration Errors

Scheduling Errors

Wrong Patient

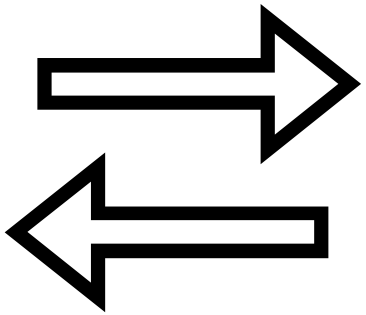
Wrong Vaccine, Route, Site, or Dosage

Incorrect Vaccine Preparation

Improper Storage and Handling of Vaccine and Diluent

Documentation Errors

Common Errors



Wrong Vaccine

Second dose swapped with another product; receiving antibodies instead of vaccine

Wrong Route

Subcutaneous instead of intramuscular

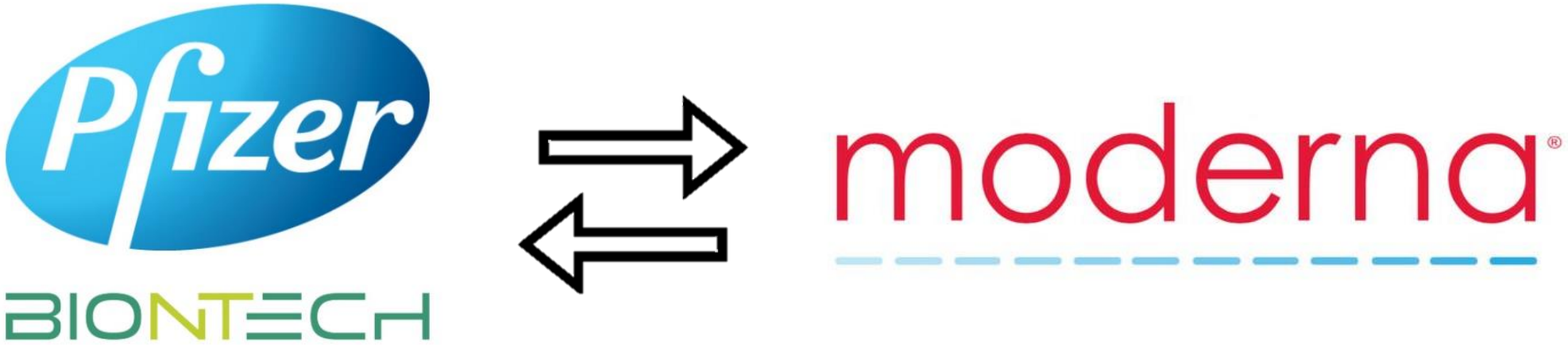
Wrong Site

Missed the deltoid muscle; injected into bursa or nerves

Wrong Dosage

Insufficient/excess Amount

Wrong Vaccine



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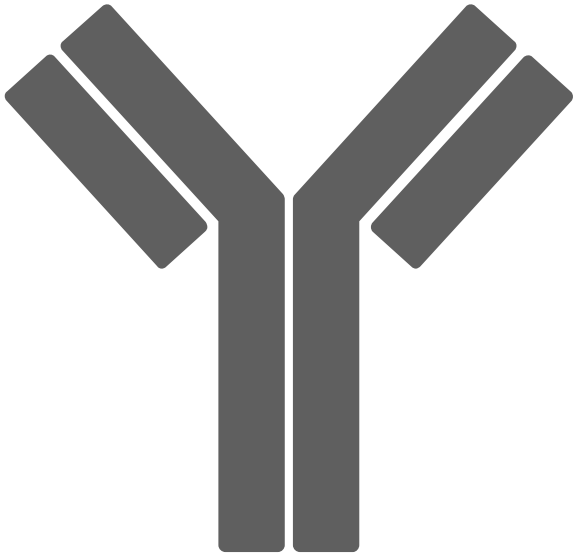
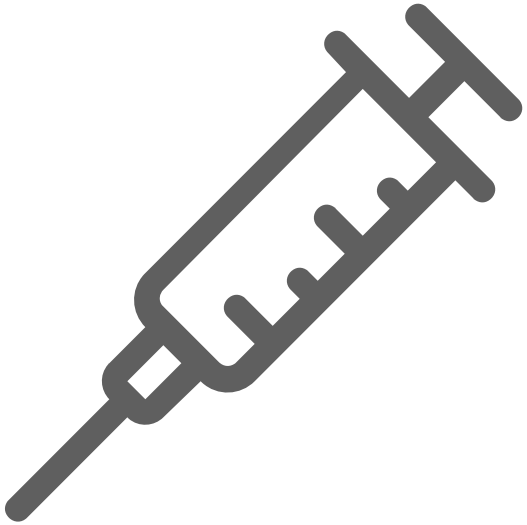


COVID-19 Antibodies

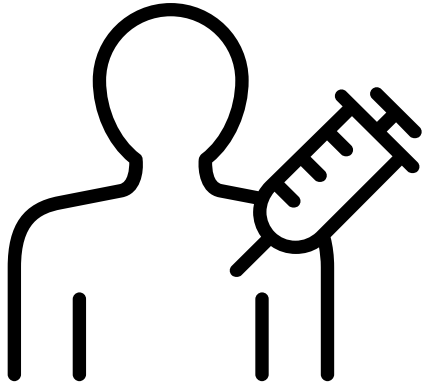


COVID-19 Vaccine

Common Errors

Wrong Vaccine

Second dose swapped with another product; receiving antibodies instead of vaccine



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Wrong Dosage

Insufficient/excess Amount

Preventing Wrong Vaccine, Site, Route, Dosage

- Store different products in separate bins
- Use color coded identification labels
- Establish “do not disturb areas”
- Triple check the vaccine vial label
- Standing orders

<u>MORE DIFFICULT IN A MASS CLINIC SETTING</u>

- Prepare vaccine for one patient at a time
- Do not administer vaccine prepared by someone else

Common Vaccine Administration Errors

Scheduling Errors

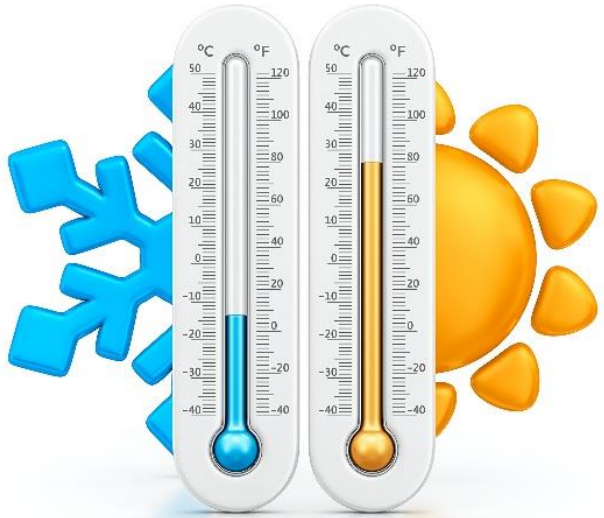
Wrong Patient

Wrong Vaccine, Route, Site, or Dosage

Improper Storage and Handling of Vaccine and Diluent

Documentation Errors

Preventing Improper Storage and Handling of Vaccine and Diluent



Remove vaccines exposed to improper temperatures

Train staff on proper storage and handling

Preventing Improper Storage and Handling of Vaccine and Diluent

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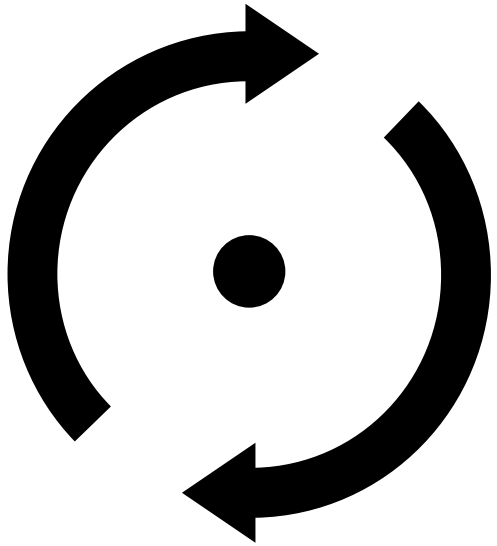
Preventing Improper Storage and Handling of Vaccine and Diluent



Rotate vaccines in storage unit

Remove expired vaccines and diluents

Preventing Improper Storage and Handling of Vaccine and Diluent

Rotate vaccines in storage unit

Remove expired vaccines and diluents

Common Vaccine Administration Errors

Scheduling Errors

Wrong Patient

Wrong Vaccine, Route, Site, or Dosage

Incorrect Vaccine Preparation

Improper Storage and Handling of Vaccine and Diluent

Documentation Errors

Preventing Wrong Patient

Verify patient's identity

Prepare vaccines for *one* patient at a time

Train staff

Preventing Wrong Patient

Verify patient's identity

Prepare vaccines for *one* patient at a time

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Preventing Wrong Patient

Verify patient's identity

Prepare vaccines for *one* patient at a time

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Common Vaccine Administration Errors

Scheduling Errors

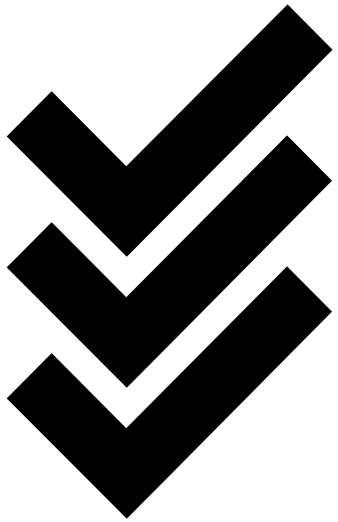
Wrong Vaccine, Route, Site, or Dosage

Incorrect Vaccine Preparation

Improper Storage and Handling of Vaccine and Diluent

Documentation Errors

Preventing Incorrect Vaccine Preparation



Triple-check instructions and labels

Verify correct needle size

Preventing Incorrect Vaccine Preparation

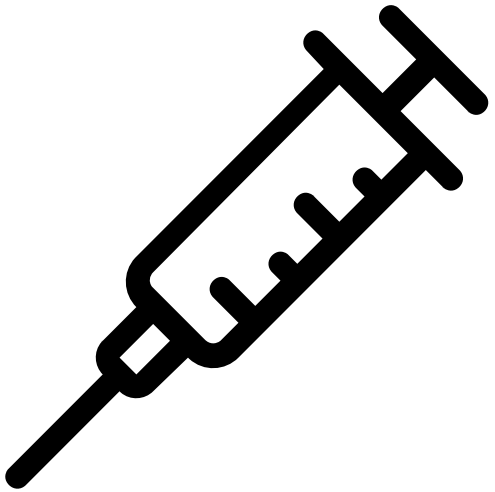
Pfizer BIONTECH

Triple-check instructions and labels

Verify correct needle size

Preventing Incorrect Vaccine Preparation

Triple-check instructions and labels



Verify correct needle size

Common Vaccine Administration Errors

Scheduling Errors

Wrong Patient

Wrong Vaccine, Route, Site, or Dosage

Incorrect Vaccine Preparation

Improper Storage and Handling of Vaccine and Diluent

Documentation Errors

Documentation Errors

Incorrect dose numbers

Incorrect lot numbers

Documentation Errors

Incorrect dose numbers

Incorrect lot numbers

Preventing Documentation Errors

Report to immunization information system within 72 hours

Double-check free text fields

What are the next steps after a vaccine administration error?

Next Steps After a Vaccine Administration Error

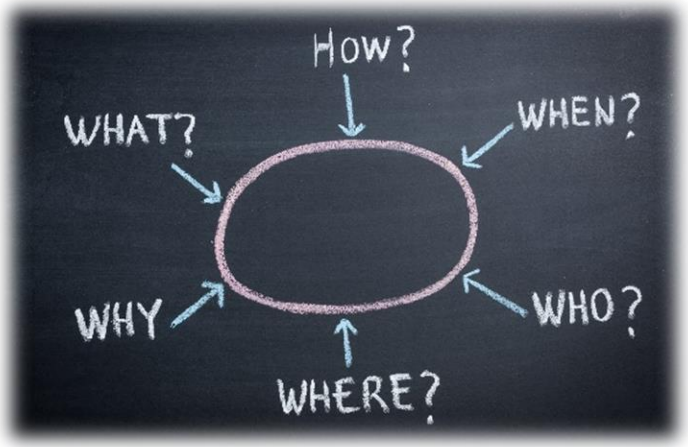
Notify patient or the parent

Assess how the error occurred

Implement strategies to prevent errors

Next Steps After a Vaccine Administration Error

Notify patient
or the parent



Assess how the error occurred

Implement strategies
to prevent errors

Next Steps After a Vaccine Administration Error

Notify patient or the parent

Assess how the error occurred

Implement strategies to prevent errors

Reporting Vaccine Administration Errors

VAERS

Vaccine Adverse Event Reporting System

www.vaers.hhs.gov

Reporting Vaccine Administration Errors

VAERS

For COVID-19 vaccines, providers are required to report:

- Any administration error (whether or not it was associated with an adverse event)
- Serious adverse events
- Multisystem inflammatory syndrome
- COVID-19 hospitalizations or deaths

Even if it is not clear that a vaccine caused the adverse event, these events should be reported

Do you repeat the dose if an error occurred?

COVID-19 Vaccine
Repeating a Vaccine Dose

▪ Incorrect site/route	▪ Do NOT repeat the dose
▪ Incorrect age: Moderna younger than 18	▪ Do NOT repeat the dose: can give a second dose of Moderna, even if not yet 18 years
▪ Supersize dose	▪ Do NOT repeat the dose
▪ Subsize dose	▪ If more than or equal to ½ the dose, do NOT repeat the dose, if less than ½ the dose repeat the dose in opposite arm
▪ Temperature deviation	▪ Contact manufacturer: if manufacturer says dose counts, do NOT repeat dose. If manufacturer says dose should be repeated, give ASAP

COVID-19 Vaccines:

Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Authorized in the United States

COVID-19 Vaccine
Repeating a Vaccine Dose

▪ Expiration/BUD violation	▪ Contact manufacturer: if manufacturer says dose counts, do NOT repeat dose. If manufacturer says dose should be repeated, give ASAP
▪ Coadministration: 14 day violation with another vaccine	▪ Do NOT repeat the dose: this is not considered an error
▪ Coadministration: 90 day violation with COVID-19 passive product	▪ Do NOT repeat the dose: this is not considered an error
▪ Minimum interval violation	▪ Do NOT repeat the dose
▪ Dose given after 6 weeks	▪ Do NOT repeat the dose: this is not considered an error

Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Authorized in the United States

COVID-19 Vaccine
Repeating a Vaccine Dose

Mixed brand series	Do NOT repeat the dose
Pfizer-COVID-19: Only diluent administered	Repeat the dose ASAP
Pfizer-COVID-19: No diluent	Do NOT repeat the dose
Pfizer-COVID-19: incorrect diluent	Contact the manufacturer: if the manufacturer says the dose should be repeated, or is silent, repeat in the opposite arm.
Pfizer-COVID-19: incorrect diluent volume: too concentrated	Do NOT repeat the dose
Pfizer-COVID-19: incorrect diluent volume: too dilute	If total volume greater than 4.0 mL after reconstitution: too dilute, need to repeat

Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Authorized in the United States

Additional Resources

Additional Resources

COVID-19 Vaccines:

COVID-19 Vaccines Authorized for Emergency Use

How to Enroll as a Healthcare Provider

Resources for Pfizer-BioNTech, Moderna, and Janssen COVID-19 Vaccines

FAQ for Optimizing COVID-19 Vaccine Preparation and Safety

Routine Vaccines:

CDC immunization schedules

https://www.cdc.gov/vaccines/ed/webinar-epv/index.html (PINK BOOK WEBINAR SERIES)

Additional Resources

***You Call the Shots*:**

Preventing Vaccine Administration Errors

Vaccine Administration: Needle Gauge and Length

You Call the Shots: The Educational Series

https://www.cdc.gov/vaccines/ed/youcalltheshots.html

Additional Resources

General Best Practice Guidelines for Immunization: Timing and Spacing of Immunobiologics

Additional Resources for Healthcare Providers

Acknowledgments

VTF Clinical Education Team

- Valerie Morelli
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- Mark Freedman
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- Bridget Hall
- Kristy Mugavero

CDC COVID-19 Response Team

CDC 24/7

PROTECTING AMERICA'S SAFETY, HEALTH, AND SECURITY

Obtaining Continuing Education

- Continuing education is available for nurses, medical assistants, and pharmacists.
- Successful completion of this continuing education activity includes the following:
  - Attending the entire live webinar or watching the webinar recording
  - Completing the evaluation available after the webinar or webinar recording
  - **On the evaluation, please mark Yes if you're interested in CEs and please specify which type of CE you wish to obtain**
  - CE certificates will be automatically sent via email after evaluation completion
- Expiration date is 4/29/22
- If you have any questions about CEs, email Trang Kuss at trang.kuss@doh.wa.gov

Questions?

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